

DIVISION OF OIL, GAS AND MINING

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April 10, 2000

Jerry Holliday Holliday Construction, Inc. 700 East Brown Canyon Road P.O. Box 502 Blanding, Utah 84511

Re:

Initial Review of Notice of Intention to Commence Large Mining Operations, Holliday Construction, Inc., Lime Ridge Mine, M/037/081, San Juan County, Utah

Dear Mr. Holliday:

The Division has completed a review of your Notice of Intention to Commence Large Mining Operations submission for the Lime Ridge Mine, located in San Juan County, Utah, which was received November 5, 1999. After reviewing the submission, the Division has several comments which will need to be addressed before tentative approval may be granted. The comments are listed under the applicable Minerals Rule heading as an attachment. Please format your response in a similar fashion. If possible, please provide a response to this review by May 15, 2000.

The Division will suspend further review of the Lime Ridge Mine notice until your response to this letter is received. If you have any questions in this regard you may contact me, Tony Gallegos, Doug Jensen, Lynn Kunzler, or Tom Munson of the Minerals Staff. If you wish to arrange a meeting to discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in responding to this review in a timely fashion.

Sincerely,

D. Wayne Hedberg Permit Supervisor

Minerals Regulatory Program

Attachment: Division Review Comments John Blake, SITLA

REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Lime Ridge Mine M/037/081 April 10, 2000

R647-4-104 - Filing Requirements and Review Procedures

The submission identifies the applicant as being a corporation. Please provide the name of the corporation to be listed as the operator for this notice. (AAG)

R647-4-104 - Operator's, Surface and Mineral Ownership

Please provide the name and address of the owners of record of the minerals to be mined. (LK)

Please provide any state mineral lease number(s) and indicate whether the land owners have been notified in writing of this proposal. (AAG)

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

A measurement of the area impacted on the Surface Facilities Map, using the scale shown, gives approximately 2.1 acres. The impacted area described in the text of the submission is 12 new acres plus five (5) acres of existing disturbance. Surety calculations by the Division will not be possible until a scaled map of the proposed disturbance is received. Please provide a revised surface facilities map showing both the current disturbed area and the proposed disturbance. Area measurements from this revised map should agree with the acreage listed in the text of your submission. (AAG)

Please submit a mine plan map showing the mining sequence and projected annual disturbance for a minimum period of five years. (DJ)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide cross-sections of the affected area showing the present ground surface, the surface after the proposed mining has occurred, and the surface after final reclamation. Because the area of the plan is relatively flat and the maps furnished have 40-foot contours, please provide at least one cross-section running North to South, through the existing pit, and one cross section running through the proposed mining area. Please provide at least two cross-sections running East-West. These sections need to be drawn to scale for calculation purposes. (AAG)

Please provide a reclamation treatments map which is of the same scale as the surface facilities map. Please use cross hatching or color coding on this map to identify areas receiving different reclamation treatments. (AAG)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc.

Please provide a narrative description of the mining operations. In this narrative please include a description of the mine equipment being used, the stockpiled products, waste stockpiles, and onsite processing equipment. (AAG)

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106.3 Estimated acreages disturbed, reclaimed, annually.

Appendix 3 states 12 acres are proposed to be disturbed and five (5) acres of disturbed area are from previous activities, which would give a total project disturbance of 17 acres. This section of the submission states the disturbance is 12 acres total. Please explain these conflicting acreage figures and provide the correct information. (AAG)

106.4 Nature of materials mined, waste and estimated tonnages

The submission indicates there will be 40,000 cubic yards of material mined. Please clarify whether this figure represents annual production, or life of mine production? (DJ)

106.5 Existing soil types, location, amount

Please provide the results of a soil survey for the proposed area. The Natural Resources Conservation Service (formerly the Soil Conservation Service) may already have a soil survey which covers the proposed area. A copy of their report should provide most of the soils data that is needed. Please provide a soil analysis for the topsoil/overburden materials which will be salvaged and used for reclamation. This soil analysis needs to include: texture, pH, EC (conductivity), CEC (cation exchange capacity), SAR (sodium absorption ratio), % Organic Matter, Total N, available phosphorus (as P_2O_5), and potassium (as K_2O). This soil data will be used to determine if fertilizers or amendments may be needed to establish vegetation. (LK)

106.6 Plan for protecting & redepositing soils

Assuming there is only one inch of topsoil over five (5) acres which can be salvaged, would yield approximately 672 cubic yards of topsoil, not the 30 cubic yards described in this submission. Please explain these conflicting volumes. Please agree to seed stockpiled topsoil to protect it from erosion and to sign, or fence the stockpiles to protect these resources until used for reclamation. (LK)

106.7 Existing vegetation - species and amount

The vegetation at the site would be classified as a desert shrub community. Vegetation ground cover in the submission is reported as 30%, which would set the Division's 70% revegetation success standard at 21% vegetation ground cover. (LK)

106.8 Depth to groundwater, extent of overburden, geology

No information has been provided regarding groundwater in the area although it is apparent that the general area is very dry. Please describe the indications of groundwater closest to the mine operation, such as springs, wells, etc. Is the proposed mining expected to intercept ground water? Please explain why or why not. (TM)

106.9 Location & size of ore, waste, tailings, ponds

This notice states there is no overburden or reject materials produced by this project. Will all reject materials or fines from crushing be sold as product or will some materials be left on site? If so, what is the expected volume of these materials? (AAG)

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R647-4-107 - Operation Practices

107.1 Public safety & welfare

107.1.12 Disposal of trash, scrap, debris

Please describe how trash and debris generated during operations will be disposed. (AAG)

107.1.13 Plugging or capping drill holes

Please confirm that no drill holes which will require plugging or capping are proposed in this project. (AAG)

107.1.14 Posting warning signs

Because this site is located on a county road, please post signs warning the public of heavy equipment operating in the area, or explain why this type of warning is unnecessary for public safety. (AAG)

107.2 Drainages to minimize damage

It is unclear in the submission whether the nearby ephemeral drainage will be impacted during active operations. Please describe any proposed drainage rerouting during active operations and show this rerouting on the surface facilities map. (TM)

107.3 Erosion control & sediment control

Please describe measures to be employed to prevent excessive erosion of topsoil and other soil materials which will be disturbed during active mining operations. (TM)

107.4 Deleterious material safety stored or removed

Please describe the locations and methods for storing fuels and other related products on site during operations. Please describe the typical volumes and types of fuels or lubricants stored on site. It onsite fuel storage is proposed, then secondary emergency containment measures must be provided sufficient to contain 110% of the total stored volume. (AAG)

107.5 Suitable soils removed & stored

Please refer to comments under R647-4-106.5 and 106.6. From the photos supplied, it appears that there may be more suitable soil material for reclamation (i.e. overburden materials) than what would typically be classified as topsoil. Overburden materials and fines should be saved for reclamation so that a minimum one foot depth of material is provided for seedling establishment. The overburden materials may require amendments to make them suitable as a plant growth medium. Please provide an analysis of this overburden material using the same parameters as listed for the soils analysis under section 106.5. (LK)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems

See comments under section R647-4-107.2. (TM)

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broadcast seeding is the most likely seeding method to be used. Attached is a recommended seed mix for your consideration. SITLA has approved the use of this seed mix via a phone call to the Division. If this seed mix is acceptable, please acknowledge your acceptance and include it in your final reclamation plan. (LK)

R647-4-111 - Reclamation Practices

111.1 Public safety & welfare

1.14 Posting warning signs

See comments under R647-4-107.1.14. (DJ)

111.3 Erosion & sediment control

See comments under R647-4-107.3. (TM)

111.12 Topsoil redistribution

Please refer to comments under R647-4-107.5. (LK)

R647-4-112 - Variance

No variances were requested in this submission. (DJ)

R647-4-113 - Surety

A reclamation surety estimate was not provided in this submission. A surety amount cannot be calculated by the Division until concerns stated in this review are addressed. (AAG)

R647-4-115 - Confidential Information

No confidential information was identified in this submission. (DJ)

Attachment: Seedmix

Recommended Revegetation Species List for

Holliday Construction, Inc. Lime Ridge mine M/037/081

Common Name	Species Name	*Rate lbs/ac (PLS)
Hycrest crested wheatgrass	Agropyron cristatum	1.0
Luna pubescent wheatgrass	Agropyron tricophorum	2.0
Boizoisky russian wildrye	Elymus junceus	1.5
Indian ricegrass	Oryzopsis hymenoides	2.0
Ladak alfalfa	Medicago sativa	1.0
Yellow Sweetclover	Melilotus officinalis	0.5
Palmer penstemon	Penstemon palmerii	0.75
Black sagebrush	Artemisia nova	0.2
4-wing saltbush	Atriplex canescens	2.0
Shadscale	Atriplex confertifolia	2.0
Rubber Rabbitbrush	Chrysothamnus nauseosus	0.5
Forage Kochia	Kochia prostrata	0.75
	Total Seed	14.2 lbs/ac

^{*} Rate is recommended for broadcast seeding. This seed mix is acceptable to SITLA

Prepared by DOGM January 31, 2000 m37-81.sdm